Nathan Joseph Savas

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Education

California State University, Long Beach *Exp. Graduation: Dec 2021*

Bachelors (B.S) In Computer Science *Concentration GPA: 3.52*

Relevant Coursework: Analysis of Algorithms, Artificial Intelligence, Intro to Computer Security, Database Fundamentals, Operating Systems, Object Oriented Application Development, Intro to Software Engineering

Experience

Amazon Web Services (AWS) *Remote (CA)*

Software Development Engineer Intern *June 2020 - August 2020*

- Worked with the AWS CodeGuru team to develop a visualization dashboard using React & Redux (TypeScript) to enable time-based analysis of user account anomalies detected by the service
- Developed an algorithm to track overlapping time intervals for a given set of anomalies and designed custom Apache ECharts components (Line & Gantt chart) to render results
- Leveraged the Redux-saga middleware library to write simplified asynchronous control flows, isolate application side effects, and test saga functions using Jest

Siemens PLM Software *Cypress, CA*

Software Engineering Intern *May 2019 - January 2020*

- Worked with the NX CAD Validation team to build a cloud application using Angular that lets customers validate design specs on the web by running custom reports on CAD models
- Developed an internal JavaScript library to provide NX cloud teams with abstractions for fetching report results and rendering these results in navigation tree components
- Integrated tool with another library to tag bitmap images on CAD models within a WebGL interface

Projects

Senior Design Project: PhotoSense

Python, JavaScript, AWS EC2

- Worked with a team of 5 to develop a full-stack AI face censoring system, deploying a Keras model as a RESTful API service to process image requests for various clients (web app, bots, chrome ext.)
- Integrated Flask API with a Redis cache to process images in batch for optimized memory usage
- Developed web-based drawing tools using the Canvas API to let users edit, add, and remove image segmentations directly within our React application

US City Chemical Release Visualizer

JavaScript, PostgreSQL

- Led a team of 3 to develop a web mapping application using React & MapboxJS to visualize 30+ years of EPA Toxic Release Inventory (TRI) data for any US city
- Developed a RESTful API with Express to fetch data from a PostgreSQL database server
- Used the Mapbox JS SDK to plot geospatial data on a map interface and React-Vis to render a visualization dashboard for in-depth analysis of a city's toxic release history

Skills

Programming Languages: Java, JavaScript, TypeScript, Python, C++, SQL, HTML, CSS

Frameworks/Tools: React, Redux, Express, Node, Git, PostgreSQL, Flask, Redis, Docker, AWS Core Services